

**UNITED STATES DEPARTMENT OF  
HEALTH AND HUMAN SERVICES**

In the Matter of: )  
 )  
STAKEHOLDERS MEETING )  
MEETING WITH THE EDMONDS )  
INSTITUTE )

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1220 L Street, N.W., Suite 600  
Washington, D.C. 20005-4018  
(202) 628-4888  
hrc@concentric.net

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Friday,  
March 12, 2004

3 MR. TURNER: I assume you're alone. There's no  
4 other people on the conference call?

6 MR. TURNER: That's fine. Again, I'm John Turner.  
7 Cindy Smith was going to join us. She's our Deputy  
8 Administrator. Unfortunately, she went home ill. We do  
9 have several other people here and I can it's an impressive  
10 crowd, since you're not here to see them. You'll have to  
11 believe me.

13 MR. TURNER: Sure. Again, I'm John Turner. My  
14 title is Director of Policy Coordination here in BRS,  
15 Biotech Regulatory Services.

18 MR. HANDLEY: I'm Lee Handley. I'm a risk  
19 assessor with BRS.

22 MR. ROSELAND: Craig Roseland and I'm with the  
23 Policy Division.

24 MR. TURNER: Some of those may have been hard to  
25 hear.

1 MS. BURROWS: I heard I think five people.

2 MR. TURNER: Yes, that's it.

3 MS. BURROWS: Great. Okay. You're all in one way  
4 or another associated with USDA?

5 MR. TURNER: We're all at USDA. We're all in  
6 APHIS and we're all in Biotechnology Regulatory Services,  
7 except Chris Zakarka, who is with Program and Policy  
8 Development, PPD.

9 MS. BURROWS: Okay.

10 MR. TURNER: She's helping us with this process of  
11 the EIS.

12 MS. BURROWS: Great.

13 MR. TURNER: Here's how we can start. I'm going  
14 to give some opening remarks and background and then I'll  
15 turn it over to you.

16 You can give a statement or we can just have a  
17 give and take of discussions. However you want to proceed  
18 after that.

19 MS. BURROWS: Okay.

20 MR. TURNER: Welcome to our stakeholder discussion  
21 series on our upcoming environmental impact statement and  
22 revised plant biotech regulation. We want to thank you for  
23 taking time from your busy schedule to participate in this  
24 meeting and sharing your thoughts with us.

25 The purpose of these briefings is to: One, share

1 information regarding our plans to develop an EIS and amend  
2 our plant biotech regulations and two, gather a diverse,  
3 informative input which will support thoughtful and  
4 effective decision making on our part and the development of  
5 our new regulations.

6 We have here from BRS some of our management team  
7 and numerous members of our staff and when available, other  
8 key Agency personnel involved in supporting BRS may stop in.

9 I should also mention two key individuals who have  
10 been dedicated to providing full-time management of our work  
11 to complete both the EIS and our revised regulations. The  
12 first is myself, I'm John Turner. I don't know if we've  
13 met, but I've been around here a few years and I'm a  
14 familiar face to some. I'm going to be leading the effort.

15 The second is a new hire, Michael Wach. He's an  
16 environmental protection specialist with our new  
17 environmental and ecological analysis unit. In addition to  
18 possessing a PhD and an environmental law JD, Michael brings  
19 research experience in plant pathology and weed science, as  
20 well as legal experience working on cases involving NEPA,  
21 the Clean Water Act, the Clean Air Act and other  
22 environmental laws.

23 As you may know, we recently participated in  
24 inter-Agency discussions with EPA, FDA and the White House,  
25 which concluded that while the coordinated framework has

1 provided an appropriate science and risk based regulatory  
2 approach for biotechnology, the more recent Plant Protection  
3 Act of 2000 provides an opportunity for APHIS to revise its  
4 regulations and potentially expand our authority, while  
5 still leveraging experience we've gained through our history  
6 of regulation.

7           We concluded those discussions with general  
8 agreement on how our biotech regulatory approach would  
9 evolve. Still there's much opportunity for public and  
10 stakeholder input as we move forward to develop the  
11 specifics of our regulatory enhancements.

12           Given this, what we would like to do in these  
13 meetings is have an opportunity to hear your thoughts, as  
14 well as have an informal give and take of ideas and we have  
15 a unique opportunity now for this type of discussion, since  
16 we've not yet begun the formal rule making process.

17           So, we're free to speak openly and exchange ideas  
18 with stakeholders in the public. Our discussion today is  
19 being professionally transcribed for two reasons. First,  
20 we want an accurate record of our discussions to facilitate  
21 our ability to capture and refer to your input. Second, in  
22 the interest of transparency and fairness to all  
23 stakeholders, we will be making available as part of the  
24 public record and potentially on our website documentation  
25 of all our stakeholder discussions so that the public and

1 the other stakeholders will have the benefit of the  
2 discussions we will be conducting this week.

3 I want to emphasize that while we we're happy to  
4 share information on the direction we are likely to take  
5 during the process, that what we will be sharing is our  
6 current thinking in BRS and that during the process, public  
7 and stakeholder input will likely influence our thinking.

8 In addition, other officials within USDA, such as  
9 our Administrator, the Under Secretary, the Office of  
10 General Counsel and the Secretary can certainly be expected  
11 to provide insightful direction as well.

12 While we value all input, it is important for us  
13 all to recognize that our thinking will likely evolve. We  
14 may have some enthusiastic discussions today on a particular  
15 aspect of the regulations, but it will evolve over time.

16 Finally, since it is hard to predict exactly what  
17 the final regulation will look like, what we can share is  
18 our BRS priority areas, which will help us set direction.

19 The first of these is rigorous regulation, which  
20 thoroughly and appropriately evaluates and ensures safety  
21 and is supported by strong compliance and enforcement.

22 The second is transparency of the regulatory  
23 process and regulatory decision making to stakeholders and  
24 the public. This is critical to public confidence.

25 The third is we must have a science based system,

1 ensuring the best science is used to support regulatory  
2 decision making to assure safety.

3 The fourth is communication, coordination and  
4 collaboration, with a full range of stakeholders.

5 Fifth and finally is international leadership. We  
6 want to ensure that international biotech standards are all  
7 science based. We need to support international regulatory  
8 capacity building and we have to consider international  
9 implications of policy and regulatory decisions that we  
10 make.

11 So now as we begin our discussions, I'm going to  
12 turn it over to you and I would ask that you just state your  
13 name again before you start with any statements or  
14 discussion that you would like to begin with.

15 MS. BURROWS: Okay. My name is Beth Burrows,  
16 B-U-R-R-O-W-S. I am the President and Director of The  
17 Edmonds, E-D-M-O-N-D-S, Institute, which is a small public  
18 interest, nonprofit, 501(C)(3) organization, headquartered  
19 in Edmonds, Washington state.

20 We have a longstanding interest in bio safety and  
21 there are several issues that I will talk about, but I would  
22 first give you a little idea of what we do so that you will  
23 understand our perception of ourselves as stakeholders in  
24 this discussion.

25 The current emphasis of the Institute's work is on



1 bio safety and the legally binding international regulation  
2 of modern biotechnologies, as well as on intellectual  
3 property rights and just policies for the maintenance and  
4 protection of bio diversity, including policies and programs  
5 that foster recognition and sustenance of agricultural bio  
6 diversity and third, on the exploration of ethical  
7 implications of new technologies, including genetic  
8 engineering.

9           We have, since our inception in the mid 1990's,  
10 had a rather distinguished board of directors. We have  
11 always worked with pro bono scientists, by which I mean  
12 scientists that have worked for us on projects without any  
13 compensation.

14           The same is true of most of the lawyers and  
15 scholars we work with. We also work with some volunteers  
16 from the general public and we have close relationships with  
17 scientists, lawyers, scholars and activists around the  
18 world.

19           We are very much committed to sustaining the  
20 world's biological and cultural diversity, including its  
21 agricultural diversity and we are very proud to be that and  
22 insistent on remaining a small organization. We believe in  
23 walking our talk, so to speak and remaining sustainable.

24           Many years ago, when the United Nations convention  
25 on biological diversity started to talk about environmental

1 and human health effects of genetic engineering, The Edmonds  
2 Institute was among the first organizations to bring  
3 scientists to the discussion.

4           In that time period, in the early days, we quickly  
5 became concerned with the scientific quality of the  
6 discussion of bio safety and we were very fortunate in that  
7 we were able to put together a team of scientists who, over  
8 a period of a few years and after many, many iterations and  
9 a double blind peer review that was managed for us by a  
10 former head of the Ecological Society of America produced a  
11 two volume manual for assessing ecological and human health  
12 effects of genetically engineered organisms.

13           This is basically a manual that uses flowcharts  
14 and has a kind of forced choice inventory of questions that  
15 moves you through a flowchart. Often the answers are either  
16 yes or no. But the yes or no always involves a basis of  
17 research.

18           We have given away thousands of bound copies of  
19 the manual throughout the world. We have distributed copies  
20 on CD. We have produced videotape bio safety lectures to  
21 accompany them and to help naive users understand how to go  
22 through the assessment path of the manual using the  
23 flowcharts and the manual can currently be found, in  
24 downloadable form in PDF files on our website, the address  
25 of which is <http://www.edmonds-institute.org>.

1           We know from the number of hits on our site over  
2   the number of years that we've had it that really tens of  
3   thousands of copies have been downloaded. This is also a  
4   manual that is used in several bio safety trainings around  
5   the world and it's used in some universities in the United  
6   States to train students in bio safety.

7           Further, the Slovenian government saw fit to  
8   translate, to appoint a high level committee to translate  
9   that manual into Slovenian and the Slovenian version now  
10  resides on the website of their Department of Environment,  
11  that is of the Slovenian government.

12           A Russian translation has been done by an NGO, a  
13  non-governmental organization in Russia and currently a  
14  translator for the United Nations has been hired to check  
15  the Russian translation to assure that it's accurate and has  
16  not wavered from the original work of the scientists.

17           I want to mention the scientists involved, because  
18  they were not what I would call NGO scientists. Among them,  
19  in reverse alphabetical order, were: Dr. Mark Wheelis of  
20  the University of California-Davis, Dr. Andrew Spielman of  
21  Harvard School of Public Health, Dr. Philip Regal of the  
22  University of Minnesota, Deborah Letoureau of the University  
23  of California at Santa Cruz, Dr. Terrie Klinger of Friday  
24  Harbor Labs at the University of Washington, Dr. Anne  
25  Kapusinski of the University of Minnesota, Dr. Conrad

1 Istock, formerly of the University of Arizona, Dr. Elaine  
2 Ingham, formerly of Oregon State University, Dr. Norman  
3 Ellstrand of the University of California at Riverside,  
4 Dr. Pushpa Bhargava of Anveshna Consultancy Services in  
5 India and Dr. Sharon Akabas of Columbia University.

6 I cannot stress enough how the making of that  
7 manual has influenced the position of The Edmonds Institute  
8 on all matters related to bio safety.

9 I strongly recommend that you go there and  
10 download copies. I know that in EPA and USDA, I think in  
11 FDA as well, there are people who have original copies that  
12 we distributed. Print copies that we distributed many years  
13 ago.

14 The reason I recommend you to go look at the  
15 manual is because it took a very long time to do and it was  
16 written to help people do bio safety or to help who seek for  
17 bio safety and in it you will see the kinds of questions and  
18 the kinds of things that we think appropriate to think  
19 about, in terms of bio safety, no matter what the organism,  
20 not matter what the product. I'll say no more than that. I  
21 could go on for hours alone talking about that.

22 The Edmonds Institute has also been involved, as I  
23 hinted at, in the work leading to the negotiations for the  
24 Cartagena Protocol on Bio Safety, which is a protocol of the  
25 convention on biological diversity.

1           We've been involved in expert and ad hoc expert  
2 working groups on a variety of areas from the bio safety  
3 clearing house through discussions of liability and excess  
4 in benefit sharing and so forth. We are convinced that  
5 whatever the USDA/APHIS should do, should be in keeping with  
6 that protocol, even though we do recognize that the United  
7 States is neither a party to the convention on biological  
8 diversity nor to the Cartagena Protocol on Bio Safety and at  
9 many key moments indeed played an oppositional role in the  
10 negotiations.

11           In particular, I would point people to the annex  
12 one and two of that protocol, which is available on the  
13 website of the convention on biological diversity as well as  
14 on the bio safety clearinghouse. The address of the website  
15 is [www.biodiv.org](http://www.biodiv.org), all lower case letters.

16           In looking at that website and considering all  
17 that we have done and I have not begun to tell you all the  
18 work of The Edmonds Institute, but I'm trying only to focus  
19 it on the bio safety related issues, I look at the sorts of  
20 things you're considering in scope and I have several things  
21 I would like you to consider.

22           One, the cost of the difficulty in understanding  
23 our laws, especially on the part of the public. It's an old  
24 saw by now, but it remains true that it is a patchwork of  
25 regulation and although from within inside the regulatory

1 agencies it may feel comfortable at this point, from without  
2 it does not and it is not transparent. It may be in some  
3 ways public, but not clear.

4           If you revise and expand authority, I think there  
5 should be something like our manual to help people  
6 understand by asking simple yes/no questions that have  
7 research implications, where any possible genetically  
8 modified, although certainly it could be in future dates  
9 changed for newer technologies, organisms fall within the  
10 ambits of all of the regulatory agencies.

11           I recognize this is not with USDA's doing, but for  
12 people to understand what you do, they also have to  
13 understand what the other agencies do and when something is  
14 and is not either or all of you.

15           When you started to say when you revise and expand  
16 your authority, you must make it clear as I would advise you  
17 to ask the other agencies to make clear there.

18           I would also enjoin all of the agencies to fill in  
19 the regulatory gaps. I think there were several issues that  
20 need to be dealt with. In particular, the question of  
21 monitoring. Not just a regulation, but monitoring over  
22 time, especially if you're thinking of deregulating, people  
23 would like to have a sense of what the data looks like. Not  
24 just the conclusions that you reach from the data, but how  
25 the data was gathered, what the data actually is and so

1     forth.

2                   A question of confidential business information is  
3     also a salient question with the public and with The Edmonds  
4     Institute. It has to do with how regulation is transparent  
5     to the public. Although we understand that for some people  
6     the environmental and human health impact may seem to be  
7     confidential business information, to the public they're  
8     absolutely necessary information for transparency and you  
9     will never have our confidence in what you do as long as any  
10    part of the impact assessment is confidential business  
11    information.

12                  We understand that you may not be able to change  
13    all regulations yourself. However, I feel it's my job as  
14    the head of a public interest group to sort of tell it like  
15    it is in terms of how it's perceived.

16                  MR. TURNER: Beth?

17                  MS. BURROWS: Yes?

18                  MR. TURNER: On that note, we usually do  
19    environmental assessments or one thing that would trigger an  
20    environmental assessment for a lot of products is near the  
21    end when we deregulate. When it's time for  
22    commercialization. Is that mostly when you have the issue  
23    with the CBI or is it the same for notifications and field  
24    tests much earlier in the process or are they both?

25                  MS. BURROWS: Depending on the organism, there

1 might be CBI concerns all the way along, starting with the  
2 right to know where it's being planted so that people in  
3 nearby places can monitor any unintended affects on their  
4 properties or on their bio diversity, that sort of thing.

5           However, certainly before it's commercialized,  
6 whatever basis there was or is for allowing the  
7 commercialization and saying such things as no significant  
8 impact, it would help the public to know what the data is  
9 that that decision is based on.

10           MR. TURNER: Okay.

11           MS. BURROWS: Again, I'm sorry. It would be much  
12 simpler for all of us if this were not complicated, but it  
13 is complicated and it is different for different organisms.

14       Just like it's different in different ecosystems, which is  
15 another set of questions, when to deregulate, because a  
16 product may seem "safe" or safe-ish if you will in one  
17 ecosystem is not necessarily an indication that it will  
18 prove safe in all ecosystems.

19           Our manual is pretty much based on a case-by-case  
20 ecosystem-by-ecosystem approach and that seems to me a  
21 science based approach. Anything else actually is a  
22 socioeconomic base decision, when we seek to make decisions  
23 in one ecosystem based on what has happened in others. I  
24 don't believe that is a science based way of proceeding.

25           I do note that although USDA and others of the



1 agencies constantly talk about the wish for science based  
2 assessment, the impact assessment may be science based to  
3 some degree, but it is also socioeconomically based. How  
4 much will it cost to do this? How much can we afford to do  
5 this and so forth and so on?

6 The question of adventitious presence I would say  
7 is as much decided in the United States on the basis of  
8 socioeconomic considerations as on the basis of perceptions  
9 of science.

10 I think it's time to just say we take a lot of  
11 things into consideration when we make decisions about what  
12 we will allow people to plant or release.

13 I don't think the socioeconomic thing is something  
14 that is only used in the third world. I think it is  
15 something we in the United States take into consideration  
16 all of the time.

17 The question of adventitious presence, as I  
18 mentioned earlier, is important. It's important to consider  
19 what we mean by adventitious presence. How, if we set a  
20 level of tolerable adventitious presence, we will guarantee  
21 over time to keep that level and not allow it to rise  
22 slowly.

23 The question of estimating costs over time rather  
24 than at the moment of change. What I mean by that is this:  
25 The question of adventitious presence is often argued on

1 the basis of it would cost too much for us to separate  
2 variety A from variety B, whether in storage containers or  
3 on land or at sea or wherever.

4 Over time that cost diminishes and so I would like  
5 to see any kind of cost analyses done over time, together  
6 taking also into consideration projections of loss of  
7 market, should those separations not be made.

8 In looking at the notification that was put in the  
9 Federal Register, I notice the importance of definitions of  
10 all words. Almost all adjectives. I know this is extremely  
11 hard to do and in some ways the most contentious things to  
12 do.

13 There were word usages like minor and unresolved.  
14 I didn't know what was meant by them. I could guess, but  
15 they were only guesses.

16 I think you should put on every one of your  
17 committees, I'm sure you'll scream at this, but I would  
18 understand your screaming too I might say, put someone on  
19 your committees who doesn't know a heck of a lot about what  
20 you usually do so they can have the ability to ask you the  
21 hard questions that are very difficult to ask when you're a  
22 member of an agency over a long period of time.

23 Often this is a member of the public, but you need  
24 very special members of the public who have rather thick  
25 skin so that they can help you see what things are not

1 intuitively obvious or even reasonable.

2           Back to the question of particular engineered  
3 plants that we have particular concerns with, beyond our  
4 concerns with any of them. Those would be crops that are  
5 engineered to express pharmaceuticals or industrial  
6 chemicals or their precursors in their tissues.

7           We, at The Edmonds Institute, would argue that  
8 those crops must be grown under strict isolation and that  
9 isolation must be monitored from seed to after harvest.

10           Without long-term human health consumption and  
11 environmental safety studies, those crops cannot be allowed  
12 to be consumed, even under the most bizarre of  
13 circumstances, such as a hungry person passing a field,  
14 taking an ear of corn and going off to boil it without  
15 paying anyone or inquiring what it actually was.

16           If they're going to be grown indoors and if strict  
17 regulations are going to be put on all effluent and all  
18 waste from those facilities, we would have no problems with  
19 pharmaceutical crops. Our worry would happen, however,  
20 where they are grown anywhere else, especially outdoors.

21           We would posit that the risks from them are too  
22 great to take and that even in what would seem to be  
23 geographical isolation, there will always be a small  
24 possibility of some presence on the equipment, on the soles  
25 of feet including the feet of birds and so that if it is

1 ever contemplated to grow these out, there must be a whole  
2 cycle analysis that ensures, with very strict fines, that  
3 none of it ever finds its way into the food supply.

4 I'm trying to think if I've left out, probably  
5 I've left out many other things that we're concerned with,  
6 but you did say at the outset that this is a back and forth  
7 kind of thing.

8 Again, I would point you to our website. There is  
9 a listing of the publications that the Institute makes  
10 available. We'll be glad to make available whatever we  
11 still have in print and we'll be glad to share at least  
12 photocopies of the things that are out of print.

13 Do you have any questions for me? I've sort of  
14 rambled on and on and not in as good a manner as I had  
15 hoped, but there it is.

16 MR. TURNER: Anyone have any questions?

17 MR. WACH: This is Mike Wach. Beth, I had a  
18 couple of questions. One is probably a smaller question so  
19 I'll ask that one first.

20 You asked about doing ecosystem analysis in  
21 determining safety. I guess are you trying to characterize  
22 a farmer's field as being an ecosystem, because --

23 MS. BURROWS: A farmer's field doesn't exist all  
24 by itself. Yes, a farmer's field is an ecosystem. That's  
25 most definitely true. That is one ecosystem. Often a

1 farmer's field is adjacent to other ecosystems and what is  
2 planted there or what is grown there may have access to  
3 other ecosystems, which is another kind of analysis. I'm  
4 thinking in terms of fish farms kinds of things as well.

5 MR. WACH: Okay. Then the other --

6 MS. BURROWS: If you --

7 MR. WACH: I'm sorry.

8 MS. BURROWS: If you go and look at our manual, I  
9 mean I'm trying to do this over the phone, I don't have  
10 overheads --

11 MR. WACH: We actually have your manual right here  
12 on the computer.

13 MS. BURROWS: Okay. Great. Although the  
14 flowcharts look daunting, it's sort of graphic, when you  
15 realize how much to start through them and answer yes or no,  
16 depending on the questions, they're actually quite easy to  
17 go through.

18 But I emphasize the answers can't be guesses. In  
19 some cases they require a great deal of science and  
20 experimentation to determine the answer for particular  
21 crops. Go ahead. I'm sorry.

22 MR. WACH: The other question. I'm not sure if  
23 you actually answered it or if you left it as an open issue,  
24 but you said to fill in gaps in our regulations. Are the  
25 things you then enumerated are those what you perceive as

1 gaps or do you perceive additional gaps?

2 MS. BURROWS: I don't know if they're gaps. There  
3 are gaps in regulations or at least there are perceived gaps  
4 in regulations and I would like to see anything, for example  
5 anything that is genetically engineered to come under some  
6 regulatory scrutiny.

7 Depending on what it is, it might not be very  
8 heavy scrutiny, but it's not clear who has what power and  
9 not clear whether everything gets taken care of, given the  
10 way things are divided right now.

11 Over the years, we've always had in the NGO  
12 community, specialists to come and talk about the regulatory  
13 system in the United States or the regulatory system in  
14 Europe and so forth.

15 It's very difficult. It is not easy for people to  
16 understand the coverage. Who, for example, regulates  
17 genetically modified insects, if anyone? Who regulates by  
18 law fish and so forth?

19 I would like to see all of the possible taxa  
20 regulated, not necessarily by you. That's the other piece  
21 of it. That's why I've been hesitant to talk about it,  
22 because I think when you change your regulations and you  
23 have an environmental and ecological analysis unit, that's  
24 very nice, but that still creates confusion as to well, what  
25 does the EPA do and where does one begin and the other leave

1 off and are there places where neither gets and will there  
2 be places where both will be?

3 In the case of regulating the human ecology, the  
4 body, the human health consumption implications, it's not  
5 clear that anybody does the kind of studies that would give  
6 comfort to the people concerned about what those  
7 implications are.

8 I know FDA has that within its ambit and I'm  
9 trying to share with you perception, not necessarily your  
10 understanding, but the perception of many people in the  
11 public. Have I been more confusing than --

12 MR. WACH: No. You said there were gaps and then  
13 you mentioned several issues and I wanted to make sure that  
14 those weren't the gaps you perceive, but there were other  
15 things that you felt were gaps. I wanted to make sure that  
16 I got those out of you.

17 MS. BURROWS: Were there other questions?

18 MR. TURNER: Obviously we've heard you and we know  
19 you think we should close gaps and there are areas where you  
20 think probably more regulation is in order. Do you see any  
21 opportunities for us to regulate any areas less than we are  
22 now? Should we be involved with every movement of a  
23 genetically engineered organism, if it's from an academic  
24 lab-to-lab small amounts or do you think --

25 MS. BURROWS: Again, you're asking me questions

1 that are sort of black and white answers and my answer will  
2 be it depends on the organism. It depends on the  
3 environment. It depends on a whole lot of things and amount  
4 isn't necessarily the salient issue.

5 If it has a severe impact, you know two microbes  
6 may be too many. I think maybe the thing that would be more  
7 helpful for me to say would be it should be clear on what  
8 basis something is judged to be eligible to be deregulated.

9 It should be clear what the process is that brings an  
10 organism or crop or whatever it is to a point where it may  
11 be considered for deregulation.

12 The process of adjudication should be transparent  
13 and it shouldn't be just a little paragraph: We're going to  
14 look into this, that and the other.

15 I would like to see the thinking laid out in that  
16 kind of flowchart way so that I, as a member of the public,  
17 can say, okay, they go through this and they ask this series  
18 of questions and the questions and the way they're laid out  
19 are based on scientific understanding at the moment of how  
20 things work.

21 Although we'll never get to perfectly safe or  
22 perfectly unsafe, we get closer to one or the other and at a  
23 certain point of closeness, things become eligible to be  
24 deregulated.

25 Then at that point, there's still a level of



1 monitoring and at another point further down the line, if it  
2 fulfills other standards or certain questions are answered,  
3 then even less regulation until there is none and always at  
4 any point there would be certain things that could start the  
5 whole process all over again, as in the case of an  
6 unforeseen event, an emergency that wasn't foreseen. A  
7 20-year impact that took a very long time to see, because it  
8 was complicated and involved multiple species and so forth.

9           That kind of transparency would be extremely  
10 helpful. All of that would look horrible on paper. It  
11 would look like unending regulation, although in fact it  
12 would be a way to decrease regulation based on what I would  
13 call principles in reasoned scientific standards.

14           But unless that's transparent, unless all of us  
15 can know what that is and how it applies and how it has some  
16 safeguards in it and the it here is the decision making, it  
17 just won't feel comfortable to us. It won't feel  
18 reasonable. It won't feel scientific. It will always just  
19 feel political. Even ad hoc for that matter.

20           MR. TURNER: Would you see that type of long-term  
21 monitoring before the final input of total deregulation as  
22 being appropriate for every crop or on a case-by-case basis  
23 after --

24           MS. BURROWS: On a case-by-case basis.

25           MR. TURNER: -- assessment?

1 MS. BURROWS: Right, on a case-by-case basis. I  
2 mean I could imagine --

3 MR. TURNER: If there was the transparency and the  
4 laying out of the process, as you've --

5 MS. BURROWS: Right. Again, one of the reasons I  
6 liked the flowchart method is we didn't have to set  
7 standards for what we should worry about or what we  
8 shouldn't worry about.

9 If it went through and you came to the end, it was  
10 likely that you would decide to do it, decide to release or  
11 whatever or decide not to. It was all of those questions  
12 that gave the comfort, not the different standards.

13 I can imagine, for example, with some things the  
14 minute you find out one answer, you might very quickly go to  
15 a kind of deregulatory scenario. With other things that  
16 have other kinds of indications, you might go through a much  
17 more extensive regulation monitoring deregulation scenario.

18 It's the scenario you want. Obviously some part  
19 of USDA's clientele are farmers and agribusiness. If you  
20 show them something like our manual, they would faint  
21 because it looks like they're going to have to hire a  
22 thousand people to take care of it.

23 Then you can show with various crops, okay, let's  
24 look what really happens here and they can see with some  
25 varieties it might very quickly go to deregulation. With

1 other varieties it might never get out of regulation and  
2 monitoring.

3 That gets you out of the standard setting that  
4 you're going to constantly revise and just gives you a  
5 process.

6 MR. WACH: Beth, are you going to submit written  
7 comments?

8 MS. BURROWS: It had not been our intention to do  
9 so. Actually we sort of said, well we do one or the other.  
10 We really are tiny and we commented the other day on  
11 creeping bentgrass, which was not our intention to do  
12 either, but we chose to do it almost at the last moment.

13 MR. WACH: One thing I might suggest is that you  
14 submit your manual.

15 MS. BURROWS: Okay. I'm sitting here with the  
16 last print version of it. Can I submit it on a CD?

17 MR. WACH: I'm sorry. What?

18 MS. BURROWS: Does it need to be submitted in  
19 print?

20 MR. WACH: No, CD is fine.

21 MS. BURROWS: Okay. I have until the 20th. I can  
22 do that.

23 MR. WACH: 23rd I think. Isn't that correct?

24 MR. TURNER: I think so.

25 MR. WACH: The 23rd.

1 MS. BURROWS: Do I need to send multiple copies?

2 I'm sorry.

3 MR. WACH: No, one is good.

4 MS. BURROWS: Again, does that go to Peter  
5 Fernandez? No. Who am I looking at here?

6 MR. WACH: It goes to Stephanie Stephens, right?

7 MS. BURROWS: Stephanie Stephens. Okay.

8 MR. WACH: Stephanie Stephens.

9 MS. BURROWS: Okay. Let me also say as I'm  
10 suggesting this manual, it is not and never was intended to  
11 be a cookbook written in stone. Some of the science has  
12 changed since it was written, but it will give you the idea.  
13 I need to say it is not a cookbook, but it is an indication  
14 of a way to think about the process.

15 MR. WACH: You said a couple things. First of  
16 all, you might want to indicate where it's being used. You  
17 mentioned a number of scientific experts who helped make it.  
18 You might want to indicate where it's being used.

19 MS. BURROWS: My goodness. I mean I can say with  
20 certainty a few universities, but where it's being used I  
21 would have to make assumption that the manuals that people  
22 tell me they used and found helpful are being used.

23 MR. WACH: Okay. That's fine.

24 MS. BURROWS: We didn't follow-up with surveys to  
25 see how it was used and whether people were being

1 forthcoming.

2 MR. TURNER: We don't want to be a burden. If you  
3 listed some of the examples that you're sure of.

4 MS. BURROWS: Okay.

5 MR. TURNER: It might be helpful. When you send  
6 it in, including the docket number is important, 03-031-2,  
7 but the instructions are on the front page of our proposed  
8 rule. The Federal Register notice of January 23, if you  
9 have that.

10 MS. BURROWS: Yes, I do have that.

11 MR. TURNER: That will give you the --

12 MS. BURROWS: I'm sorry we've run out of print  
13 copies. I did send tons and tons. We've sent them to  
14 various committees of the National Academy and so forth. I  
15 just don't have any more. I photocopied --

16 MR. WACH: That's okay, Beth. It's just that we  
17 can't submit it for you.

18 MS. BURROWS: No, I understand it.

19 MR. WACH: It's available to us on the web, but we  
20 can't submit it into the record on your behalf. You have to  
21 do it.

22 MS. BURROWS: Okay. Simply telling people where  
23 it resides --

24 MR. WACH: That doesn't count. Sorry.

25 MS. BURROWS: It doesn't count. Okay. Thank you

1 for that suggestion. I will do that.

2 MR. TURNER: Anyone else here have questions for  
3 Beth? Beth, do you have any other questions for us today?

4 MS. BURROWS: No. I actually don't quite see the  
5 point of me asking where you think the thing is going. I  
6 respect the fact that you're going to have to take a lot of  
7 testimony and comments into consideration and that it will  
8 change a great deal.

9 Rather than me getting all excited about something  
10 you might say today and then self-righteous about it later  
11 when you've changed your mind based on other testimony and  
12 other input, I think I'll wait to see what happens when you  
13 submit your suggestions later. That just seems to me a  
14 reasonable thing to do.

15 MR. TURNER: That's fair enough. As the process  
16 goes on, there's going to be more convergence so there will  
17 be other opportunities to comment and what we will have to  
18 comment upon will be more specific at those times.

19 We'll have a draft EIS, which you can comment on  
20 and at some point a proposed regulation I should say which  
21 you can comment upon. In terms of where it will go, all I  
22 will say is it is hard to say, but truly we're taking a  
23 broad look and we are considering all of the input and we  
24 will be considering a broad array of options.

25 MS. BURROWS: I welcome, I should have said that

1 at the open and I apologize for not doing so, I welcome the  
2 fact that USDA/APHIS is considering the possibility to  
3 revise their regulations. I think it would be more helpful  
4 if they could do it in tandem with the other agencies also  
5 considering revisions in their regulation.

6 It feels a bit like one member of a family making  
7 change and although that might be good in some senses, it  
8 will upset certain equilibria and possibly create other  
9 problems.

10 I would welcome, for example, another sort of  
11 grand meeting of all of the agencies, although I recognize  
12 that would be horrible for most of you. Just the logistics  
13 of it would be horrible, but that's probably what would be  
14 most useful.

15 Again, I think USDA/APHIS for doing this. I can't  
16 wait, because I do hope that whatever comes out will be  
17 improved and more clear, particularly to the public.

18 MR. TURNER: We hope so too and transparency is  
19 certainly a worthy goal.

20 MS. BURROWS: But transparency is not the same as  
21 clarity.

22 MR. TURNER: Transparent and clear. Clarity is  
23 important too. I guess what I'm saying is it's a good point  
24 that we agree with.

25 MS. BURROWS: Okay. I don't know what else to

1 say. I'm not prepared to say more at this point, but I am  
2 prepared to answer any questions you may have.

3 MR. TURNER: It looks like there are no more  
4 questions here.

5 MS. BURROWS: Okay.

6 MR. TURNER: You can certainly contact any of us  
7 if you think of additional things that would be helpful to  
8 you. Again, we thank you so much for taking the time to  
9 share your thoughts with us.

10 MS. BURROWS: Okay. Thank you.

11 (Whereupon, at 1:59 p.m., the hearing in the  
12 above-entitled matter was adjourned.)

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REPORTER'S CERTIFICATE

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4 CASE TITLE: Biotechnology Regulatory Services

5 HEARING DATE: March 12, 2004

6 LOCATION: Riverdale, Maryland

7

8 I hereby certify that the proceedings and evidence are  
9 contained fully and accurately on the tapes and notes  
10 reported by me at the hearing in the above case before the  
11 United States Department of Agriculture.

12

13

14 Date: March 12, 2004

15

16 Renee Miskell

17 Official Reporter

18 Heritage Reporting Corporation

19 Suite 600

20 1220 L Street, N.W.

21 Washington, D.C. 20005

22

23

24

25